IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of Inventor(s): Barb Ariel Cohen and Michael F. Morris

WARNING: 37 C.F.R. § 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(i) is filed supplying or changing the name or names of the inventor or inventors."

For (title): METHOD FOR SEX BIASING SPERMATOZOA

1. Type of Application

This new application is for a(n) (check one applicable item below)

> Original (nonprovisional) [X]

CERTIFICATION UNDER 37 C.F.R. 1.10*

(Express Mail label number is mandatory.) (Express Mail certification is optional.)

I hereby certify that this correspondence and the documents referred to as attached therein are being deposited with the United States Postal Service on this date November 26, 2003, in an envelope as "Express Mail Post Office to Addressee," mailing Label Number EV 317948171 US addressed to Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

> Signature of person mailing paper Helen Murray Tarbi

WARNING:

Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. 1.8 cannot be used to

obtain a date of mailing or transmission for this correspondence.

*WARNING:

Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. 1.10(b).

"Since the filing of correspondence under \S 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

	[]	Design
	[]	Plant
WARNII		Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C., unless the International Application is being filed as a divisional, continuation or continuation-in-part on.
WARNI	ν <i>G:</i>	Do not use this transmittal for the filing of a provisional application.
NOTE:	TRANSM	the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION INTERPRETATION OF THE FILING OF THIS CONTINUATION APPLICATION.
	[]	Divisional.
	ſì	Continuation.
	[]	Continuation-in-part (C-I-P).
•	D C4	-S.D.: I. C. A 1: 4: (-) (25 II C.C. 110(-) 120 121)

2. Benefit of Prior U.S. Application(s) (35 U.S.C. 119(e), 120, or 121)

NOTE: A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. 112. Each prior application must also be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designating the United States of America; or
- (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time period set forth in § 1.53(f).

37 C.F.R. § 1.78(a)(1).

NOTE If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. 120, 121 or 365(c). (35 U.S.C. 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. 119, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

WARNI	within th	When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal holiday are District of Columbia, any nonprovisional application claiming benefit of the provisional application must prior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C.F.R. § 1.78(a)(3)			
	[]	The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.			
3.	Papers	s Enclosed			
	A.	Required for Filing Date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 1.153 (Design) Application			
		55 Pages of Specification 13 Pages of Claims (95 claims) 3 Sheets of Drawings 1 Page Abstract			
WARNI	patent apparer and to the or one copy	DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a opplication. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made iginal drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only is required or desired. For comments on proposed then-new 37 C.F.R. 1.84, see Notice of March 9, 1988. G. 57-62).			
NOTE:	E: "Identifying indicia, if provided, should include the application number or the title of the invention, inventor docket number (if any), and the name and telephone number of a person to call if the Office is unable to material drawings to the proper application. This information should be placed on the back of each sheet of drawing minimum distance of 1.5 cm. (5/8 inch) down from the top of the page" 37 C.F.R. § 1.84(c)).				
		(complete the following, if applicable)			
	[]	The enclosed drawing(s) are photograph(s), and there is also attached a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." 37 C.F.R. § 1.84(b).			
	[X] []	Formal Informal			
	В.	Other Papers Enclosed			
	[] [] [] []	Preliminary Amendment Information Disclosure Statement (37 C.F.R. § 1.98) Form PTO-1449 (PTO/SB/08A and 08B) Citations Declaration of Biological Deposit Submission of "Sequence Listing," computer readable copy and/or amendment pertaining thereto for biotechnology invention containing nucleotide and/or amino acid sequence.			

·

.

	[] []	Authoriz Special C Other		f Attorney(s) to Accept and Follow Instructions from Representative nts			
4.	Declar	ation or (Oath (i	ncluding power of attorney)			
NOTE:	A newly executed declaration is not required in a continuation or divisional application provided the prior nonprovisional application contained a declaration as required, the application being filed is by all or fewer than all the inventors named in the prior application, there is no new matter in the application being filed, and a copy of the executed declaration filed in the prior application (showing the signature or an indication thereon that it was signed) is submitted. The copy must be accompanied by a statement requesting deletion of the names of person(s) who are not inventors of the application being filed. If the declaration in the prior application was filed under § 1.47 then a copy of that declaration must be filed accompanied by a copy of the decision granting § 1.47 status or, if a nonsigning person under § 1.47 has subsequently joined in a prior application, then a copy of the subsequently executed declaration must be filed. See 37 C.F.R. § 1.63(d)(1)-(3).						
any othe	each inver r given na	ntor by full n nme or initial	ame, inc l, and the	te an application must be executed, identify the specification to which it is directed, luding the family name, and at least one given name without abbreviation together with exercise residence, post office address and country of citizenship of each inventor, and state inventor. 37 C.F.R. § 1.63(a)(1)-(4).			
	[X]	Enclosed	i				
		Executed	d by				
				(check all applicable boxes)			
		[] l	joint in	r (s). presentative of inventor(s). 37 C.F.R. § 1.42 or 1.43. ventor or person showing a proprietary interest on behalf of inventor who to sign or cannot be reached.			
		[[]	This is the petition required by 37 C.F.R. § 1.47 and the statement required by 37 C.F.R. § 1.47 is also attached. See item 13 below for fee.			
	[]	Not Encl	losed.	r			
NOTE:	applicati continua	ion contains ition or conti	subject i inuation-	on in the U.S. of an International Application, or where the completion of the U.S. matter in addition to the International Application, the application may be treated as a in-part, as the case may be, utilizing ADDED PAGE FOR NEW APPLICATION NEFIT OF PRIOR U.S. APPLICATION CLAIMED.			
				tion is made by a person authorized under 37 C.F.R. 1.41(c) on behalf of bove named inventor(s).			
	(The	declaratio	on or o	ath, along with the surcharge required by 37 C.F.R. § 1.16(e), can be filed subsequently).			
		[[] .	Showing that the filing is authorized. (not required unless called into question. 37 C.F.R. § 1.41(d))			

5. Inventorship Statement

WARNING: If the named inventors are each not the inventors of all the claims an explanation, including the ownership of the various claims at the time the last claimed invention was made, should be submitted.

The inventorship for all the claims in this application are:

	[X]	The san	ne.						
			or						
	[]	the last	same. An explanation, including the ownership of the various claims at the time claimed invention was made, is submitted. will be submitted.						
6.	Langu	age							
NOTE:	translati	on of the no	uding a signed oath or declaration may be filed in a language other than English. An English on-English language application and the processing fee of \$130.00 required by 37 C.F.R. § to be filed with the application, or within such time as may be set by the Office. 37 C.F.R. §						
	[X]	English Non-En							
			The attached translation includes a statement that the translation is accurate. 37 C.F.R. § 1.52(d).						
7.	Assign	ment							
	[X]	An assignment of the invention to Vicam L.P.							
			is attached. A separate [X] "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or [] FORM PTO 1595 is also attached.						
			will follow.						
NOTE:	"If an as	signment is	s submitted with a new application, send two separate letters-one for the application and one for						

NOTE: "If an assignment is submitted with a new application, send two separate letters-one for the application and one for the assignment" Notice of May 4, 1990 (1114 O.G. 77-78).

WARNING: A newly executed "STATEMENT UNDER 37 C.F.R. § 3.73(b)" must be filed when a continuation-in-part application is filed by an assignee. Notice of April 30, 1993, 1150 O.G. 62-64.

NOTE: This item is for any foreign priority for which the application being filed directly relates. If any parent U.S. application or International Application from which this application claims benefit under 35 U.S.C. 120 is itself entitled to priority from a prior foreign application, then complete item 18 on the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

8. Fee Calculation (37 C.F.R. § 1.16)

A. [X] Regular application

		CLAIMS	S AS FILED .		-
Claims	Number Filed	Basic Fee Allowance	Number Extra	Rate	Basic Fee 37 C.F.R. § 1.16(a) \$385.00
Total Claims (37 C.F.R. § 1.16(c))	95	20	75	\$ 9.00= \$ = \$ 675.00	=
Independent (Claims				
(37 C.F.R. § 1.16(b))	10	3	7	\$ 43.00 = \$301.00	
Multiple Dep Claim(s), if as (37 C.F.R. § 1.16(d))				\$145.00 \$ 0.00	
[] [] [] NOTE: If the fo	Amendment cancel Amendment deletir Fee for extra claims tees for extra claims are no tion of the time period set for	ng multiple-depe s is not being pain of paid on filing the	ndencies is enclose id at this time. y must be paid or the identification.	claims cancelled by o	
		Fi	ling Fee Calculation	on \$ 1,3	61.00
В.	[] Design app (\$310.00—37 C.F.				

(\$480.00—37 C.F.R. § 1.16(g))

Plant application

Filing Fee Calculation

\$

Filing Fee Calculation

9. Small Entity Statement(s)

C.

[] This is a filing by a small entity under 37 C.F.R. §§ 1.9 and 1.27.

WARNING: "Status as a small entity must be specifically established in each application or patent in which the status is available and desired. Status as a small entity in one application or patent does not affect any other application or patent,

including applications or patents which are directly or indirectly dependent upon the application or patent in which the status has been established. The refiling of an application under § 1.53 as a continuation, division, or continuation-in-part (including a continued prosecution application under § 1.53(d)), or the filing of a reissue application requires a new determination as to continued entitlement to small entity status for the continuing or reissue application. A nonprovisional application claiming benefit under 35 U.S.C. 119(e), 120, 121, or 365(c) of a prior application, or a reissue application may rely on a statement filed in the prior application or in the patent if the nonprovisional application or the reissue application includes a reference to the statement in the prior application or in the patent or includes a copy of the statement in the prior application or in the patent and status as a small entity is still proper and desired. The payment of the small entity basic statutory filing fee will be treated as such a reference for purposes of this section." 37 C.F.R. § 1.28(a)(2).

(complete the following, if applicable)

	[]		as a sma _/d for this		,	, file	ed on		-	-	-		from	which	benefit	is	being
		35 U.S		[] [] [] []	1 1 1	119 120, 121,	(e), ,	•									
		and which status as a small entity is still proper and desired.															
		[]	А сору	of the s	state	tem	ent ir	n the	e pri	ior ap	plica	ation :	is includ	led.			
		Filing I	Fee Calc	ulation ((50	0%	of A,	Во	or C	abov	/e)		\$				
NOTE:		Any excess of the full fee paid will be refunded if a small entity status is established refund request are filed within 2 months of the date of timely payment of a full fee. The two-month period is not extendable under § 1.136. 37 C.F.R. § 1.28(a).															
10.	Reques	equest for International-Type Search (37 C.F.R. § 1.104(d))															
					(6	(con	mplete	e, if	app	olicab	ble)						
	[]		prepare Il examir									t for	this ap	plication	at the	time	when
11.	Fee Pay	ment B	eing Ma	ide at T	Γhis	is Ti	ime										
	[]	Not En	closed														
		[]		ng fee is nd the s			-				7 C.1	F. R . §	1.16(e)	can be j	paid sub	sequ	ently.)
	[X]	Enclose	ed														

	[X]	Filing fee	\$ 1,361.00
	[X]	Recording assignment (\$40.00; 37 C.F.R. § 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION.")	\$ 40.00
	[]	Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached (\$130.00; 37 C.F.R. §§ 1.47 and 1.17(i))	S
		(\$130.00, 37 C.P.R. 99 1.47 and 1.17(1))	φ
	[]	For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(k))	\$
	[]	Processing and retention fee (\$130.00; 37 C.F.R. §§ 1.53(d) and 1.21(l))	\$
	[]	Fee for international-type search report (\$40.00; 37 C.F.R. § 1.21(e))	\$
NOTE:	the application indicate that it	21(1) establishes a fee for processing and retaining any application the pursuant to 37 C.F.R. § 1.53(f) and this, as well as the changes n order to obtain the benefit of a prior U.S. application, either the dretention fee of § 1.21(1) must be paid, within 1 year from notification	to 37 C.F.R. § 1.53 and 1.78(a)(1) basic filing fee must be paid, or the
		Total Fees Enclosed	\$ 1,401.00
12.	Method of	Payment of Fees	
	[X] Che	eck in the amount of \$ 1,401.00	
		arge Account No in the amount of \$ luplicate of this transmittal is attached.	·

NOTE: Fees should be itemized in such a manner that it is clear for which purpose the fees are paid. 37 C.F.R. § 1.22(b).

13. Authorization to Charge Additional Fees

WARNING: If no fees are to be paid on filing, the following items should not be completed.

- WARNING: Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.
 - [X] The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No. 04-1105.
 - [X] 37 C.F.R. § 1.16(a), (f) or (g) (filing fees)
 - [X] 37 C.F.R. § 1.16(b), (c) and (d) (presentation of extra claims)
- NOTE: Because additional fees for excess or multiple dependent claims not paid on filing or on later presentation must only be paid or these claims cancelled by amendment prior to the expiration of the time period set for response by the PTO in any notice of fee deficiency (37 C.F.R. § 1.16(d)), it might be best not to authorize the PTO to charge additional claim fees, except possibly when dealing with amendments after final action.
 - [X] 37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)
 - [X] 37 C.F.R. § 1.17(a)(1)-(5) (extension fees pursuant to § 1.136(a).
 - [X] 37 C.F.R. § 1.17 (application processing fees)
- NOTE: "A written request may be submitted in an application that is an authorization to treat any concurrent or future reply, requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive petition for an extension of time in any concurrent reply requiring a petition for an extension of time under this paragraph for its timely submission." 37 C.F.R. § 1.136(a)(3).
 - [] 37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))
- NOTE: Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the notice of allowance. 37 C.F.R. § 1.311(b)).
- NOTE: 37 C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filed in the application . . . prior to paying, or at the time of paying, . . issue fee." From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

14. Instructions as to Overpayment

NOTE: "... Amounts of twenty-five dollars or less will not be returned unless specifically requested within a reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars may be returned by check or, if requested, by credit to a deposit account." 37 C.F.R. § 1.26(a).

[X] Credit Account No. ___04-1105__.

[] Refund

Date: November 26, 2003

Customer No. 21874

SIGNATURE OF PRACTITIONER George W. Neuner (Reg. No: 26,964)

EDWARDS & ANGELL, LLP

PO BOX 9169

Boston, MA 02209

Tel. No. (617) 439-4444

BOS2_356426.1